Maddie Weber

Math, 7

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Souring through the air, heading full speed towards the ground and splat, you hit the ground. When bungee jumping, the people have to make an estimate, to figure out the correct length of the rope you are attached to. If the bungee cord is too short, the flyer will not get the full experience and if it is too long, they could be seriously injured. We simulated this by using a Barbie and rubber bands. We did this so we could see how this lesson relates to things in real life. In the investigation, each group used a Barbie and attached it to a certain amount of rubber bands. We did 6 trials adding one rubber band each time. We did each trial 3 times and averaged the length of each fall. Then we figured out what the slope was. To do this we used the point slope formula=11.95. After we found the slope we used the equation Y=7.5+11.5x to find the best line of fit. When we found this, we went to189.76inches and found out how many rubber bands we needed. We ended up using 15 rubber bands and she had a successful fall.

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| Number Of Rubber Bands | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | 6 | | |
| Trials | 17.5 | 18 | 18 | 32 | 31.5 | 30.8 | 45 | 43 | 44 | 55 | 55 | 56 | 67 | 68 | 68 | 81 | 81 | 80 |
| Mean | 17.8 | | | 31.4 | | | 44 | | | 55.3 | | | 67.6 | | | 80.6 | | |